

2 way ball valve M1 with electric actuator



General:

- Valve body: PVC-U
- Seal material: EPDM / FPM
- Ball seating joint: PTFE
- Dimensions: DN10 – DN50
d16 – d63
d3/8" – d2"

Connector types:

- Solvent socket DIN / ASTM / JIS
- Solvent spigot DIN
- Threaded socket BSP / NPT
- Fixed flange DIN / ANSI / JIS

Operating pressure:

PVC DN10 – DN50 PN16

Technical features:

Ball Valve

- Silicone free
- Buttress thread
- Double axial gasket
- Floating ball
- Double sided blocked ball
- Adjustable ball seating joint
- Integrated bottom mounting stand
- Radial installation or removal
- Maintenance free

Actuator (*)

- Adjustable limit switch
- Mechanical travel stops
- Secured manual override
- Protection IP65
- Torque limiter
- Position feedback

* Technical details see page 5

Accessories:

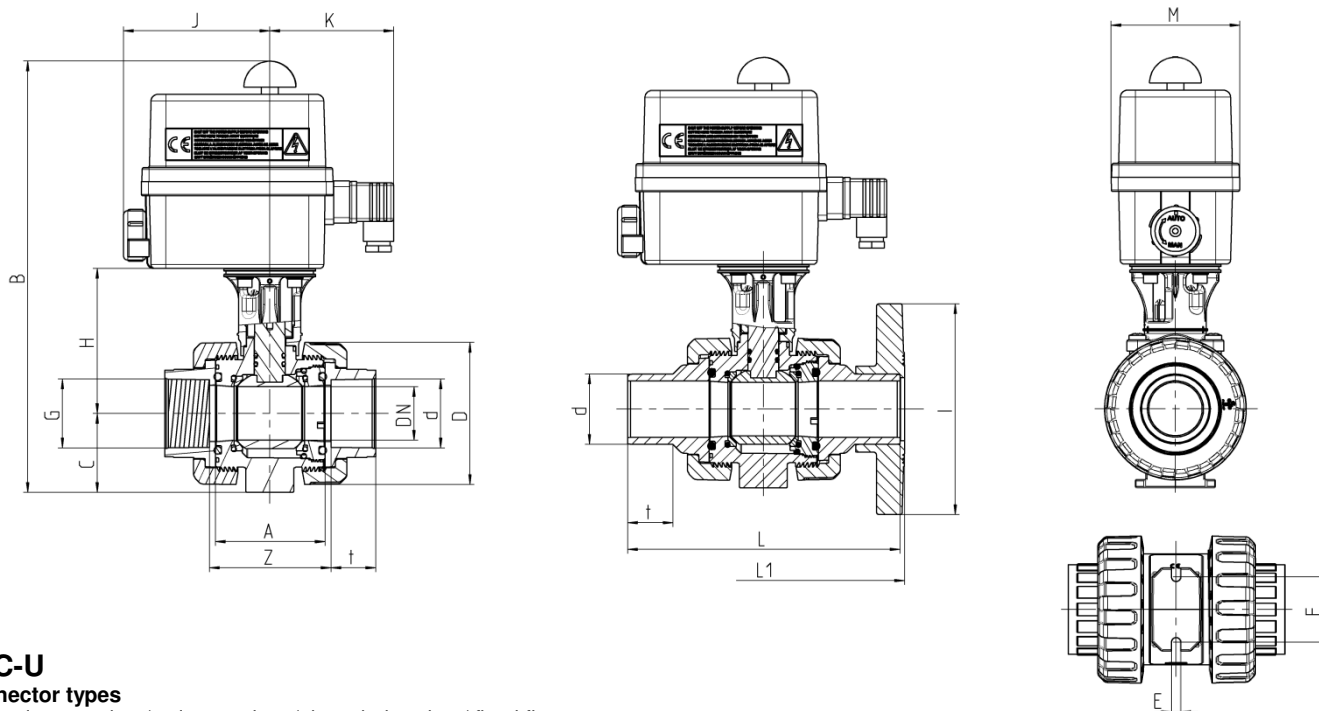
- Clamping / spacing element

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2 way ball valve M1

with electric actuator

Dimensions:



PVC-U

Connector types

PVC solvent socket / solvent spigot / threaded socket / fixed flange

DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
ISO flange type	F04	F04	F04	F04	F05	F05	F05
G ¹ TSO	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	45	45	53,5	54	62	78	87
B	260	260	272,5	278	295	306	320,5
C	33	33	40	43	51	56	64
D	55,5	55,5	62	70	84	101	115
E	5,5	5,5	5,5	6,5	6,5	6,5	6,5
F	34	34	36	38	40	45	50
H	80	80	85,5	88	97	103	109,5
I	-	97	105	125	140	150	165
J	90	90	90	90	90	90	90
K	107	107	107	107	107	107	107
t ² SSO	16	16,5	19,5	23	26,5	31,5	38,5
t ³ SSP	17	16,5	19,5	23	26,5	31,5	38,5
Z ² SSO	51	50	59,5	60	68,5	86	98
Z ¹ TSO	48	50	60	60	68	87	98
L ³ SSP	98	123,5	143,5	153,5	173,5	193,5	223,5
L1 ⁴ FF	-	130	150	160	180	200	230
M	92	92	92	92	92	92	92

Dimensions in mm

¹ TSO = threaded socket

² SSO = solvent socket

³ SSP = solvent spigot

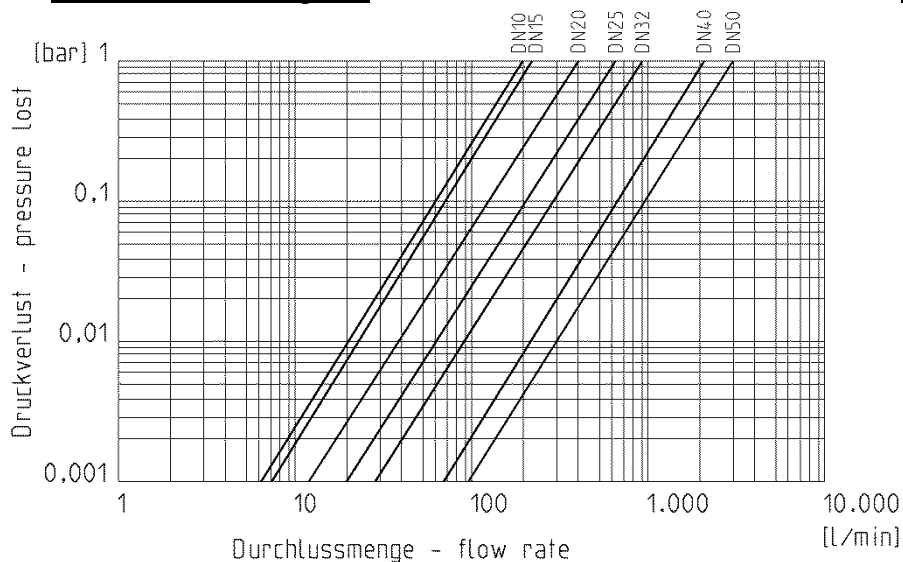
⁴ FF = fixed flange

- = currently not realised

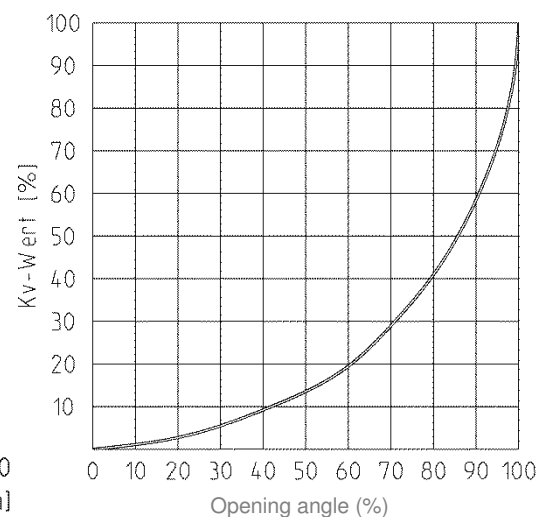
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Diagrams:

Pressure loss diagram



Flow characteristics

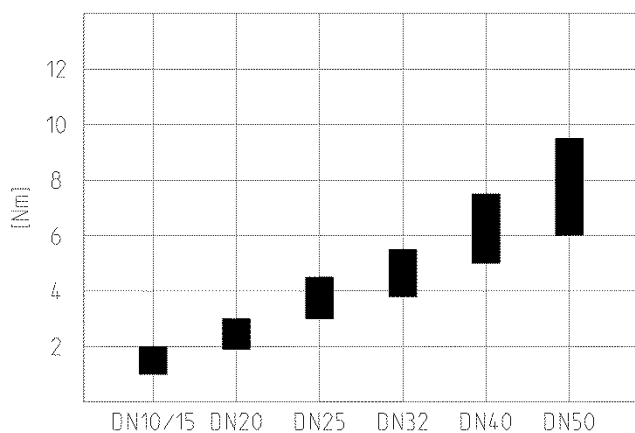


Cv value table

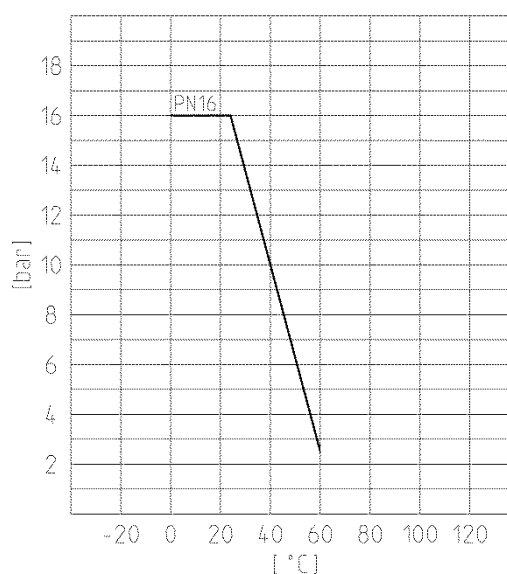
Pressure loss	DN10	DN15	DN20	DN25	DN32	DN40	DN50
0,001 bar	6,2	7,1	12,6	19,9	28,4	67	94,2
1 bar	198	225	400	630	900	2120	3000

Specification in l/min (PN16 Pipe)

Torque



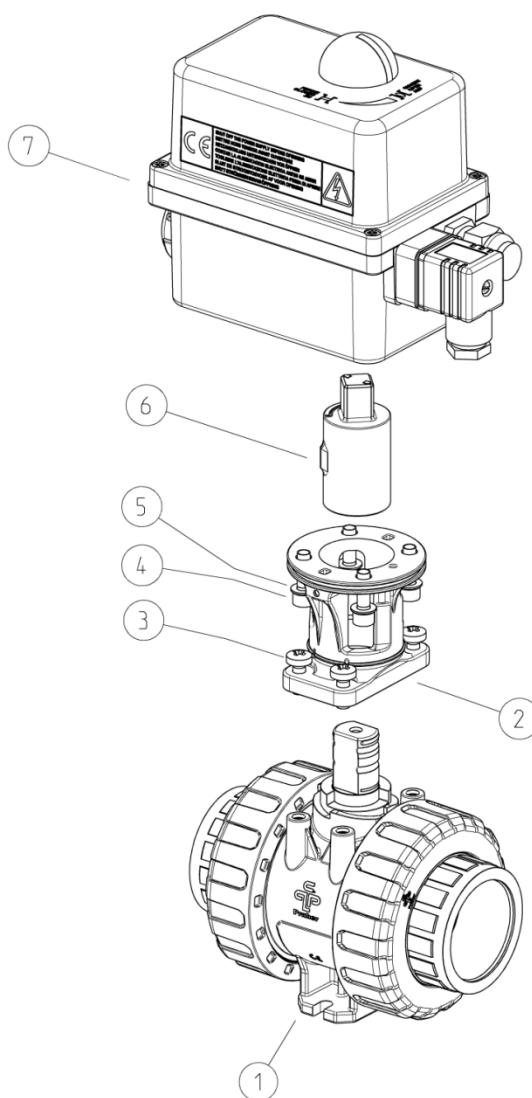
Pressure – temperature



2 way ball valve M1 with electric actuator

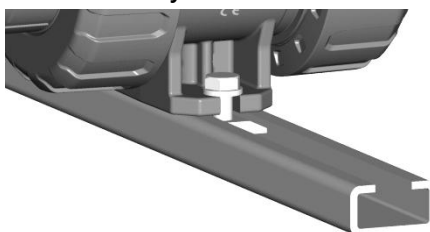
Exploded drawing:

- 01. ball valve
- 02. bracket (material: PA-GF)
- 03. screw
- 04. hexagon socket screw
- 05. toothed washer
- 06. coupling – actuator (material: PA-GF)
- 07. actuator

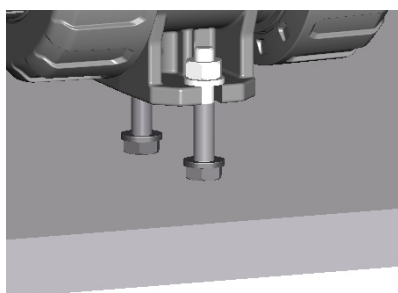


Bottom mounting stand – mounting possibilities:

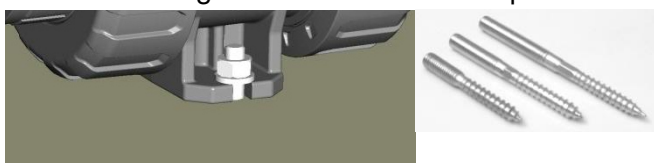
- Assembly rail



- Plate



- Masonry / Concrete
 - Hanger screw and dowel required



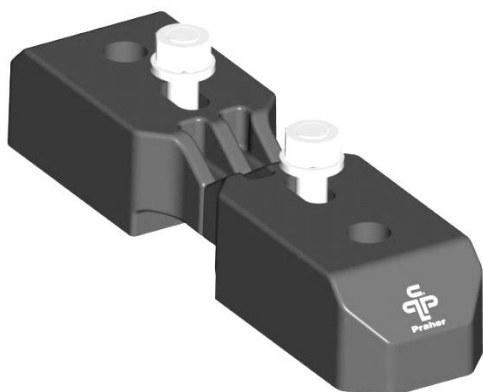
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Technical data electric actuator:

Electric actuator	
Type	ER20
torque	20Nm
Voltage	90 - 240V 50/60Hz (90 – 350V DC) 24V 50/60Hz (24V DC)
Operating time	13s
Power	15W
ISO flange	F03-F04-F05
Star drive nut	14
Limit switch	2 limit switch preadjusted 2 indicator
Mechanical stop	90°
Duration duty	30%
Rotation angle	90°
Protection	IP65
Ambient temperature	Operating: -10°C bis +55°C
Weight	1 kg

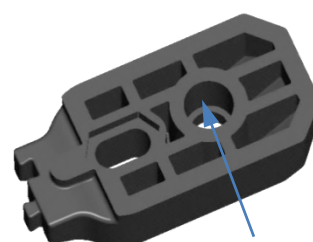
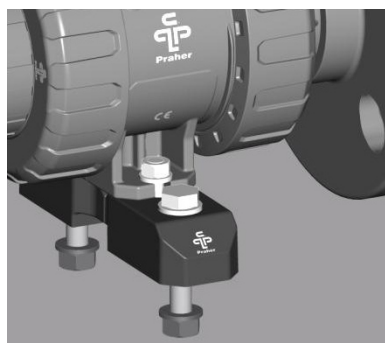
Accessories

Clamping / spacing element:



Technical features:

- Using for fixing as:
 - Clamping element
 - floors, walls, ceilings
 - plate
 - Spacing element
(screws additionally necessary)
 - for flange connection
- Bore for threaded bush

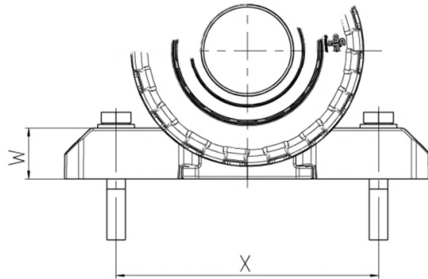


Bore for threaded bush

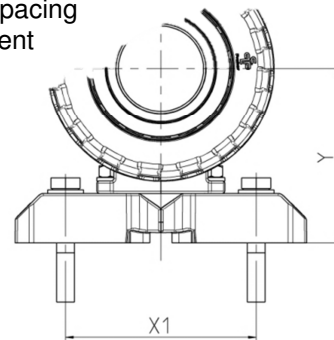
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Dimensions:

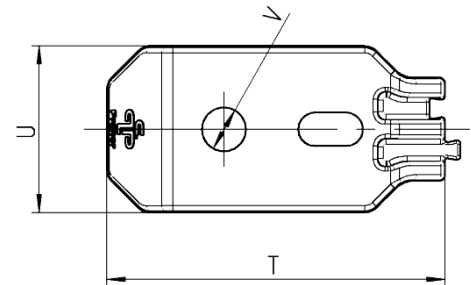
Use as clamping
element



Use as spacing
element



DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
T	54	54	54	65	65	65	65
U	25	25	25	32	32	32	32
V	6,5	6,5	6,5	8,5	8,5	8,5	8,5
W	16	16	16	22	22	22	22
X	90	90	94	107	109	114	119
X1	70	70	70	85	85	85	85
Y	49	49	56	65	73	78	86



Dimensions in mm